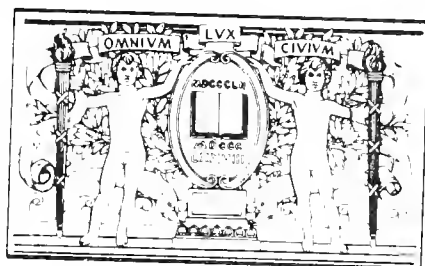


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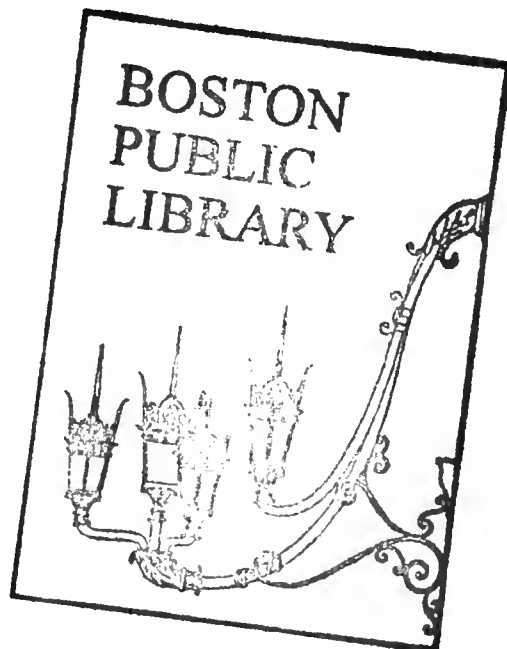


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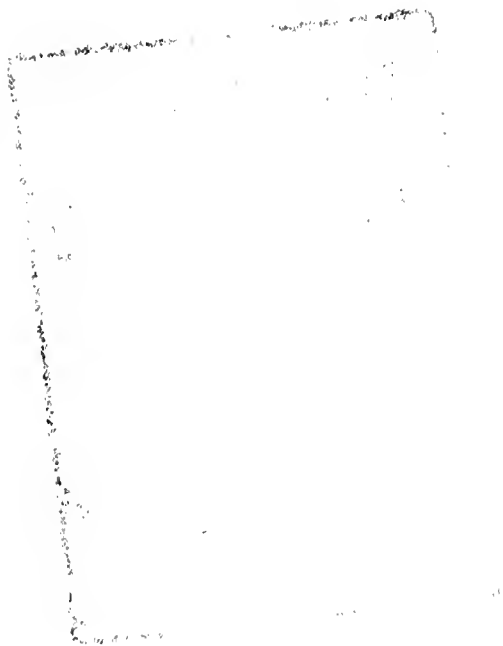


REPORT OF LAND USE AND BUILDING CONDITION SURVEYS
FOR THE CENTRAL BUSINESS DISTRICT URBAN RENEWAL AREA

Prepared by:
Boston Redevelopment Authority Staff



CBD
B65 R. Repl
c.1 1963



I. Introduction

This report was prepared by staff members of the Authority under the supervision of the Development Administrator.

It includes a listing of the land use and building condition surveys that were made by staff members and consultants to the Authority, an outline of survey procedures, a statement of the standards employed, and a summary of the results of the several surveys.

II. Background

In 1961 the Authority undertook exterior surveys of land use, building occupancy and building conditions throughout a large part of the City of Boston. The field survey information, statistically integrated with 1961 City of Boston Assessing Department data, formed the research material essential for general planning and for the preparation of the ten General Neighborhood Renewal Plans, including the Downtown area in which the Central Business District is located.

Because of the recognition of the complexity of structures and occupancy and the value and importance of real estate and economic functions within the Downtown area, buildings within this area were surveyed in greater detail than elsewhere in the City and interior inspections were conducted in all buildings where entry was permitted.

The information obtained provided planners and administrators with a comprehensive understanding of the Downtown area as a whole and enabled basic initial decisions to be made—for example, to set project boundaries within the area and to outline proposed priorities and to define scope of renewal activity.

When project planning was undertaken for the Central Business District Project in 1963, more detailed, accurate and timely information was required. Therefore, two major statistical inventories were undertaken—a land use survey and a survey of building conditions. Descriptions of these studies follow.

III. Land Use Survey

A. Survey Procedures

In the period 1963-1964, the Boston Redevelopment Authority staff undertook a comprehensive land use survey of all the properties within the Central Business District Project Area. The survey was carried out according to procedures established by the professional planning staff of the Authority. At that time the economic consultant for the Central Business District outlined specific data requirements to be fulfilled by this survey and advised the Authority on data collection and analysis procedures.

A standard field survey form was developed for recording detailed data on each establishment on a floor-to-floor basis as

well as specific information for each building as a whole throughout the Project Area. Also the form provides for recording all quantitative findings developed by the office research staff.

The attached sample field sheet indicates the range of data items surveyed and collected and includes the following: the number of enterprises or establishments, name and description of each enterprise or establishment, Standard Industrial Classification category, space-using "activities" within each enterprise or establishment (i.e. office, storage, production space, etc.), amount of floor area for each enterprise or establishment and "activity" unit therein, and the amount of vacant space, if any, on each floor.

The observation and collection of field data was limited to "net" floor space. Corridor, elevator shaft, or basement and storage space attributable to normal building operation and maintenance was not subject to inspection and data recording in the field.

For the building as a whole, observed renovation activity was described and located. Also the existence of any passageway, corridor, or open floor access into adjoining buildings was noted and located.

All buildings were entered and examined by the staff of the

Authority with the following exceptions:

- 1) 5 historical buildings;
- 2) 11 vacant (locked and boarded up) buildings;
- 3) City Mart building;
- 4) 3 buildings to which access was denied;
- 5) Approximately 20 Chinese residential buildings;
- 6) 10 city parking garages.

Information on this group of buildings was obtained, as needed, from business directories and other appropriate sources.

Surveyors entered and examined each building in its entirety and recorded information on a floor-to-floor basis. Completed field sheets were periodically rechecked in the field by the supervisory staff to insure that all items were being recorded accurately and in accordance with survey procedures. All survey forms were then reviewed and checked in the office for completeness and internal consistency.

The data was processed and analyzed by the Authority staff to obtain summaries for each building, for each block, and for the entire Project Area. Attached are the summaries for the total Project Area.

The form "Activity by Floor" summarizes all buildings in terms of ten basic space-using activities, and the form "Enterprise by Floor" summarizes building occupancy in terms of detailed economic categories.

In addition, the Project Area was divided into functional subareas. The map illustrating these subareas is included with this report. The extent of each kind of occupancy found in the several subareas was compiled both in terms of the original "activity" and "enterprise" categories and by a system of generalized cross-tabulated categories found useful for planning analysis.

Table I attached to this report summarizes building space use by five generalized occupancy categories.

B. Utilization of Survey Results

Full, detailed, and accurate information was obtained from the Land Use Survey for the use of the Authority and its consultants.

Summary findings of building use by economic categories (Standard Industrial Classification) provided the economic consultant the necessary research base to develop conclusions on the economic role of the Central Business District in relation to the city as a whole and to the metropolitan region.

The statistical summaries have been used to measure the economic activity in various buildings and groups of buildings within the Project Area and to measure current economic activity against future potential. The summaries have also been used to estimate the number of persons employed, the type of employment in various areas, and the resulting demand for public and private facilities by such persons.

Particularly important has been the knowledge gained on both vacancy rates and the location of large amounts of vacant space as an indication of building space marketability and economic return.

Also, the descriptive data on the location, by floor, of various activities or the location of passageways between adjoining buildings was of considerable aid to staff architects in developing building and site design studies.

Finally, of primary and continuing importance were the initial field survey sheets containing complete information on the occupancy of each building. Included were the names and locations of businesses and the amount and type of space used, along with floor and building footage totals. From this basic resource material information about the location of various types of businesses—for example, all the eating and drinking establishments in the Project Area, or all the government offices occupying rented space—was readily available for special studies as needed.

IV. Building Conditions

A. Survey Procedures

A survey of the physical condition of buildings throughout the Project Area was conducted during 1964 and 1965 by the Authority staff and its consultants. The purpose of the survey was to obtain up-to-date information on the actual structural characteristics of the buildings, so as to measure the extent and nature of

building deficiencies within the Project Area. The survey was intended to provide necessary factual data to enable the Authority to consider the eligibility of the Project Area under State and Federal law and to use the results of the survey in deciding on what planning measures should be adopted as part of the urban renewal plan.

Because of the large size, complexity, and variety of types of buildings, the Authority retained the professional engineering firm of Charles T. Main, Inc., of Boston, to conduct building condition surveys of approximately one-half of the buildings within the area. The choice of the buildings to be surveyed by the consultant was based on the surveys undertaken three years previously. Charles T. Main., Inc. carried out its part of the work with the use of professional engineers under the supervision of an officer of the firm.

Members of the Boston Redevelopment Authority staff accompanied the consultant's engineers throughout this survey. Under the supervision of the Project Engineer, these men then carried out interior inspections for half of the remaining buildings within the Project Area.

The attached map shows the buildings which were surveyed by Charles T. Main, Inc., the buildings surveyed by the Authority staff,

and the buildings to which access was denied. In cases where access was denied, an exterior survey was made.

Survey information was recorded on the Building Examination Schedule developed by the Authority. This form was based on forms used by the Authority for non-residential properties in other project areas. Minor additions were made on the advice of Charles T. Main, Inc. in order to meet the unique conditions found in the Downtown area. A copy of this form is attached. The survey form provided for the recording of all pertinent information concerning the type and condition of walls, floors, ceilings, roofs, exits, major mechanical equipment, fire safety fixtures, utilities and other fixtures within all structures.

All buildings for which survey forms were filled out in the 1964-1965 Charles T. Main, Inc. and BRA survey were scored by averaging the scores noted on the forms.

After such numerical scoring took place, the results were checked by the Chief Planner and Chief Architect for the Project to insure that the results obtained from the numerical scoring were consistent with observed conditions and reflected an accurate summary of the building conditions found in the Project Area.

Also, the scoring results were checked by the Chief Planner and Chief Architect to insure that a consistent level of evaluation was employed throughout the survey area by the several persons who inspected the buildings.

It should be noted that the following historic buildings were not examined and, for the purpose of tabulating survey results, were considered to be standard:

The Old State House
The Old South Meeting House
City Hall
St. Paul's Cathedral
The Old Corner Bookstore

B. Survey Standards

The Authority staff established standards for evaluating all buildings within the Project Area. These standards were developed pursuant to federal law and are consistent with standards employed by the Authority in other projects previously undertaken.

All buildings were classified as standard, deficient, or structurally substandard requiring clearance.

A structurally substandard building is one containing two or more "structural defects", or one such "structural defect", plus defects in more than 25% of those "minor items" that were examined and scored.

A deficient building is one containing one "structural defect", or defects in more than 25% of those "minor items" that were examined and scored.

All other buildings are standard.

A defect was found to exist if the item examined was more than 25% deficient. If it was possible to measure the width,

length, area, or surface of the item examined, then the 25% was taken of such width, length, area or surface; otherwise, the 25% was a measure of the degree or intensity of the defect.

If the same item was examined on several floors, the average of the per cents of deficiency given to the condition of such items on each of the floors was used.

"Structural defects" consist of the following:

1. Interior Walls

- (a) Cracks in base material;
- (b) Base material - loose, missing or broken;
- (c) Evidence of leaks.

2. Floors

- (a) Sagging or pitched.

3. Roof

- (a) Roof material - loose, missing or deteriorated;
- (b) Roof - sagging or out of line.

4. Foundations and Basement

- (a) Exterior surface - loose, broken or deteriorated;
- (b) Exterior foundation - deteriorated, sinking or out of line;
- (c) Basement foundation walls - deteriorated;
- (d) Columns or piers - loose, missing, or deteriorated;
- (e) Framing - split or deteriorated.

5. Exterior Walls

- (a) Masonry and joints - loose, missing or deteriorated;
- (b) Other siding - loose, missing or deteriorated;
- (c) Walls out of plumb or line.

Other elements of a building as listed on the Building Examination Schedule were considered to be "minor items".

In addition, utilities were examined for plumbing, heating, electrical and fire code violations.

C. Survey Results

Pursuant to the standards described above, 234 (35.3 percent) buildings were graded "standard", 235 (35.4 percent) were graded "deficient", and 194 (29.3 percent) were graded "substandard".

Building condition was based on a maximum of 135 separate ratings in 29 categories (see attached survey form).

Of the 474 buildings for which interior surveys were made, the following had one or more defects in the structural items indicated:

- | | | |
|---|----|---------|
| 1. <u>Interior Walls</u> (cracks in base material; base material loose, missing, or broken; evidence of leaks) | 65 | (13.7%) |
| 2. <u>Floors</u> (sagging or pitched) | 48 | (10.1%) |
| 3. <u>Roof</u> (sagging or out of line; material loose, missing, or deteriorated) | 93 | (19.6%) |
| 4. <u>Foundations and Basement</u> (inside or outside surface loose, broken, or deteriorated; foundations deteriorated, sinking, or out of line; basement columns or piers loose, missing, or deteriorated; basement framing split or deteriorated) | 81 | (17.1%) |
| 5. <u>Exterior Walls</u> (masonry and joints or other siding material loose, missing, or deteriorated; walls out of plumb or line) | 87 | (18.4%) |

Other results of the building condition survey are as

follows:

128	(27.0%)	had defective, inadequate, or deteriorated <u>plumbing</u> .
75	(15.8%)	buildings had <u>elevators</u> that were obsolete or defective.
175	(36.9%)	buildings had exposed <u>wiring</u> or other defects in the electrical system.
100	(21.1%)	buildings had inadequate or unsafe <u>boiler rooms</u> or <u>heating systems</u> .
26	(5.4%)	buildings had inadequate <u>fire protection</u> .

The above findings, relative to the above group of 474 buildings, were representative of all buildings within the Project Area.

Owner Green St. Bldg.
 Address 100 Green St.

Bldg. Name Green St. Bldg.
 Bldg. Address 100 Green St.

Fl.	Establishment	#B	Enterprise Description	SBC	Act.	%Fl.	Fl.	Bldg. Sq. Footage Total	Vacant	%
	1	1	Misc. Bus. Servi.	100		10		1,200		
	1	1	Tax Consultant	80		10		1,200		
	1	1	Dentist	90	10	10		1,200		
	1	1	Women's Store	100		20		2,400		
	1	1	Shoe Store	50	1	20		2,400		
2							2	12,000		
	1	1	Women's Store	50	5	50		6,000		
	1	1	Shoe Store	50		20		2,400		
	1	1	Restaurant	50		10		1,200		
	1	1	Shoe Store	50		10		1,200		
	1	1	Car Shop	50		5		600	600	5
1							1	12,000		
	1	1	Women's Store	50	10	30		3,600		
	1	1	(repair shop)	50	1	10		280		
	1	1	Restaurant	50	1	30		3,600		
	1	1	Shoe Shop	50	1	10		280		
	1	1	Women's Hats	50	2	20		1,760		
B							B	8,800		
		12	TOTAL					32,800	600	18

Parcel Area 12,141

Renovation Activity: first floor
 (none _____)

Setback: _____
 (none _____)

B/1 2 3 4 5 6 7 8 9 10 _____

Floor Access: (to Bldg. 10) B 1 2 3 4 5 6 7 8 9 10 _____
 (none _____) B 1 2 3 4 5 6 7 8 9 10 _____
 B 1 2 3 4 5 6 7 8 9 10 _____

Additional Comments: Vacant space being painted and prepared for retail sales type use.

Note: vacant space functions as first floor on Green St. First floor appears to be second, etc.

Block 557 Bldg. 13, Page 1 of 1

BRA Bldg.

(2)

Project Total.

Floor	A	B	C	D	E	F	G	H	I	T
14	172,255	—	—	—	3,165	—	—	62,200	3,211	178,700
13	161,516	—	—	—	21,256	—	—	63,300	6,2	191,466
12	174,110	—	2,570	41,242	5,411	—	—	63,300	13,61	238,300
11	143,555	—	970	11,410	2,7	—	—	63,300	13,61	478,100
10	151,430	—	—	10,200	13,61	—	—	103,200	12,600	623,100
9	—	—	—	—	—	—	16,200	13,200	—	773,400
8	—	—	17,700	—	—	—	—	40,2	—	1044,100
7	—	75,900	—	52,000	—	—	—	—	—	1,073,100
6	—	111,100	—	53,100	108,280	—	—	15,100	—	1,173,890
5	—	—	—	—	—	—	—	—	—	2,502,115
4	—	403,200	58,100	444,100	202,120	—	—	17,200	173,200	2,919,015
3	10,300	213,015	73,100	436,100	305,100	—	153,400	12,100	3,100	3,116,970
2	100,000	503,400	6,400	404,200	201,900	—	203,715	40,200	18,100	3,327,200
1	111,300	401,100	4,100	1,000	70	—	5,100	25,100	103,100	3,572,5
	271,300	1,002,800	15,100	2,100	75,100	—	475,100	—	—	3,651,700
B	—	—	200,200	601,400	100	—	—	7,200	3	2,001,200
SB	—	—	1,200	77,400	—	—	—	—	—	233,300
T	1994	250,200	445,570	325,570	198,250	102,100	74,000	153,370	133,100	1,010,100

Project Total No. (___ of ___)

[illegible]

CBD Total 2

Use Desc	1	2	3	4	5	6	7	8	9	10	Total	
0 Vacant	153,947	223,420	365,515	233,645	323,115	140,915	46,425	74,210	44,520	20,915	1,994,777	0
01-14 Ac.ing.	—	—	—	—	—	—	—	—	—	—	—	01-14
15-17 Const.	5,680	11,750	24,200	6,870	4,440	1,330	—	3,460	3,470	3,300	1,995	15-17
19-39 Manuf.	101,770	249,010	387,560	383,770	343,945	307,210	113,420	145,035	72,025	68,255	2,391,815	19-39
40-49 Util.	123,579	113,410	69,220	55,210	40,220	44,230	43,270	46,080	27,600	21,700	755,319	40-49
50 Unsele	451,095	316,215	356,235	323,400	220,520	132,390	66,880	50,270	50,575	15,870	2,340,130	50
52-59 Retail	187,191	387,175	678,610	614,680	521,950	348,325	174,620	124,510	80,710	28,455	6,216,431	52-59
52 Hard.	43,275	11,700	14,700	11,700	—	—	—	—	—	—	11,695	52
*53 G.Mech.	73,370	433,280	423,425	413,030	225,530	287,000	126,700	100,075	73,300	25,510	3,373,250	*53
54 Food	23,925	—	—	—	—	—	—	—	—	—	37,845	54
55 Auto	5,525	—	—	—	—	—	—	—	—	—	6,470	55
56 Bus.	35,270	—	—	—	—	—	—	—	—	—	10,78,782	*56
*57 Farm.	76,220	—	—	—	—	—	—	—	—	—	227,830	*57
58 Misc.	13,220	—	—	—	—	—	—	—	—	—	620,530	58
59	20,020	—	—	—	—	—	—	—	—	—	(4,678,852)	59
60-67 F.I.R.	346,781	235,790	308,425	226,305	230,750	197,615	120,840	116,295	141,750	158,285	2,828,746	60-67
70-89 Serv.	653,997	313,945	818,460	793,900	665,950	428,200	417,905	403,540	335,970	232,520	6,500,127	70-89
70 Hotel	64,652	105,115	126,770	135,170	124,150	117,000	117,705	110,440	106,300	104,820	1,441,322	70
72 Pers.	56,470	—	53,925	34,720	32,215	23,010	13,175	7,785	33,035	6,540	364,295	72
73 Bus.	6,350	—	15,780	71,425	55,535	22,610	23,910	21,255	440	15,030	400,380	73
75-76 Repair	25,970	30,920	326,045	194,550	136,070	146,725	105,030	93,470	45,240	43,120	1,440,005	75-76
78-79 Rec.	190,820	—	118,070	80,950	43,060	6,150	1,200	3,100	—	—	1,76,650	78-79
81 Legal	4,150	22,210	45,570	61,020	15,020	25,215	25,925	24,020	71,900	475,640	672,100	81
82-85 Inst.	15,220	—	123,270	—	—	—	—	—	—	—	837,810	82-85
89 Misc.	26,220	33,750	98,000	71,480	53,870	67,040	71,210	48,230	42,025	30,220	671,075	89
83 Resid.	19,225	56,650	63,150	28,320	13,910	2,980	—	—	—	—	177,605	83
91-94 Gov.	93,225	121,925	123,905	136,635	123,960	99,170	105,520	70,900	31,700	57,440	1,508,540	91-94
Column Total	3,654,784	3,327,620	3,164,970	2,969,015	2,522,115	1,703,280	1,227,190	1,044,100	713,400	623,110	24,468,695	Total

*G.A.F.

	0	1	2	3	4	5	6	7	8	9	10	Total
0 Vacant												
01-14 Ag. Mch.												
15-17 Const.												
19-39 Manuf.												
40-49 Util.												
50 Whsale												
52-59 Retail												
52 Hard.												
*53 G.Mrch.												
54 Food												
55 Auto												
*56 Apprl.												
*57 Furn.												
58 Eat-Dr.												
59 Misc.												
*G.A.P. Sales												
60-67 F.I.R.												
70-89 Serv.												
70 Hotel												
72 Pers.												
73 Bus.												
75-76 Repair												
78-79 Rec.												
81 Legal												
82-85 Inst.												
89 Misc.												
83 Resid.												
91-94 Gov.												
Column Total												
% Base	1	2	3	4	5	6	7	8	9	10		

Assess. Bldg. _____
BFA Bldg. _____
(Pg. _____ of _____)

c.BD Total 42

[illegible]



UPPER
WASHINGTON

LADDER

FINANCIAL

BLOCKS
WASH-
SUMMER

DISTRICT

CHURCH

GREEN

GARMENT

CHINA-
TOWN

SOUTH

STATION

LEMOINE

DISTRICT

PLANNING AND DEVELOPMENT AUTHORITY

CENTRAL

THE DISTRICT

SQUARES

0 200 400

TABLE I

BUILDING SPACE USE

GENERALIZED OCCUPANCY CATEGORIES

Areas	Total Sq. Ft.	Retail Sales	Service Retail	Office	Other	Vacant
Upper Washington	2,573,735	500,655	541,945	994,690	296,760	239,685
Ladder Blocks	2,720,840	1,315,550	306,320	548,535	320,375	230,060
Washington Sumner	3,111,200	2,747,635	208,260	43,405	40,220	71,600
Church Green	2,695,410	361,665	506,360	632,735	831,175	363,475
Financial District	3,983,200	118,330	100,980	3,137,670	578,785	47,435
Garment Chinatown	1,823,610	80,480	115,440	551,675	815,615	260,400
Hinge Area	2,743,330	178,105	747,250	399,045	1,104,225	314,705
Park Square	2,694,530	215,062	1,530,786	309,251	496,319	143,112
Leather District	2,213,540	7,520	245,155	1,144,760	509,380	306,725
Total	24,559,395	5,525,002	4,302,496	7,761,846	4,992,854	1,977,197

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